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Result
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Perfect score:
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                                                                                                                                                                                                                                                                                                                              Database
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Maximum Match
                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
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                                                                                        18
19
                                                                                                                                                   110
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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169
167.5
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length: 2000000000
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1: uniprot_sprot:*
2: uniprot_trembl:*
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SNG1_MOUSE
SNG1_RAT
                                                                 SNG1_CABEL
SNG4_MOUSE
SNG4_HUMAN
Q68ES8
Q9NHW1
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Q6AZR4
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                             Q6PEJ1
Q853G7
Q8NHW3
Q9NHW3
Q92KD9
                                                                                                                                                           SNG2 HUMAN
Q7QHR6
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PTMB_BI
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Q8c225
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Q6azr4
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Q43761
              044359
Q92kd9
Q9k678
Q9h4h5
                                            Q6pej1
Q853g7
Q9nhw3
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                                                                                                                                    homo sapien
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0 homo sapien
3 drosophila
0 rattus norv
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mus musculu
homo sapien
7 mycobacteri
3 nephila cla
9 nephila cla
9 rhizobium m
6 bacillus ha
5 oryza sativ
7 gallus gall
4 photobacter
                                                                                                                                                                  xenopus
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xenopus lae
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  SNG1_HUMAN
                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                      SNG1 HUMAN STANDARD; FRI; 237 A... 043759; 043757; 043758; 096J56; Q9UGZ4; 30-MAY-2000 (Rel. 39, Created) 30-MAY-2000 (Rel. 39, Last sequence update) 25-OCT-2004 (Rel. 45, Last annotation update)
                                                                                                                                                                                                                 "Characterization of the human synaptogyrin gene family.";
Hum. Genet. 103:131-141(1998).
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50	49	48	47	46	45	44	4	42	41	<b>4</b> 0	39	38	37	36	35	34	ω u	32
74.5	74.5	75	75	75	75	75	75	75	75	75.5	75.5	75.5	75.5	75.5	76	76	76	76
10.6	10.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.8	10.8	10.8	10.8
533	533	760	667	439	439	439	439	249	249	530	460	348	348	232	519	439	288	251
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Q81VY5	Q73FF3	Q6BLQ5	Q8VUH1	Q6HE62	Q81MC4	Q818Y3	Q635H8	Q7G6Z4	Q946I4	MATP_HUMAN	Q6P2P0	Y489_MYCBO	Y479_MYCTU	Q6TLG1	Q7NFW8	Q731J4	Q6ZM74	Q7ZWV8
Q81vy5 bacillus an	Q73ff3 bacilius ce	~			bacil	Q818y3 bacillus ce	_	oryza sac	oryza	_	Q6p2p0 homo sapien			Q6tig1 brachydanio	Q/niw8 gloeobacter	Q731]4 pacitius ce	Q62m74 brachydanio	-

234 AA

ALIGNMENTS

MEDLINE=98430994; PubMed=9760194; Kedra D., Pan H.-Q., Seroussi E., Collins J.E., Dunham I., Blennow ! Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Synaptogyrin-1. Name=SYNGR1; Dumanski J.P.; SEQUENCE FROM N.A. NCBI\_TaxID=9606; Homo sapiens (Human) ; 13 Fransson I., E., Roe B.A., Guilbaud C., Piehl F.,

RX MEDILINES FROM N.A.

MEDILINES-20057165; PubMed=10591208; DOI=10.1038/990031;

RA Clamp M., Smink L.J., Ainscough R., Almeida J.P., Babbage A.K.,

RA Clamp M., Smink L.J., Ainscough R., Almeida J.P., Babbage A.K.,

RA Bagyuley C., Bailey J., Barlow K.F., Bates K.N., Beasley O.P.,

RA Burrill W.D., Burton J., Carder C., Carter N.P., Chen Y., Clark G.,

RA Clegg S.M., Cobley V.E., Cole C.G., Collier R.E., Connor R.,

RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson B.,

RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson B.,

RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson B.,

RA Chami P.D., Dockree C., Dodsworth S.J., Durbin R.M., Ellington A.G.,

RA Syans K.L., Fey J.M., Pleming K., French L., Garner A.A.,

RA Gilbert J.G.R., Goward M.E., Grafham D.V., Griffiths M.N.D., Hall C.,

RA Hall R.E., Hall-Tamlyn G., Heathcott R.W., Ho S., Holmes S.,

RA Hall R.E., Hall-Tamlyn G., Heathcott R.W., Ho S., Holmes S.,

RA Hall R.E., Jones M.C., Kershaw J., Kimberley A.M., King A.,

RA Hall R.E., Hall-Tamlyn G., Leversha M.A., Lloyd C., Lloyd D.M.,

RA Martyn I.D., Mashreghi-Mohammadi M., Matthews L.H., Mccann O.T.,

RA Mcclay J., Melaren S., McMurray A.A., Milne S.A., Mortimore B.J.,

RA Mcclay J., Melaren S., McMurray A.A., Milne S.A., Mortimore B.J.,

RA Scott C.E., Sehra H.K., Skuce C.D., Smalley S., Smith M.L.,

RA Williams L., Hubbard T., Bentley D.R., Beck S., Rogers J., Shimizu N.,

RA Williams L., Hubbard T., Bentley D.R., Beck S., Rogers J., Shimizu N.,

RA Roe B.A., Chen F., Chu L., Crabtree J., Deschamps S., Do A., Do T.,

RA Roe B.A., Chen F., Chu L., Crabtree J., Deschamps S., Do A., Do T., SEQUENCE FROM N.A. 3 H z

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RA Strausberg R.L., Feingold B.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsich F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J., Schmutz J.,
RA Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
RA Butterfield Y.S.N., Krzywinneki M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.B., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RA Dorman A., Pang F., Fu Y., Hu P., Hua A., Kenton S., Lai H., Lao H.I., RA Lewis J., Lewis S., Lin S.-P., Loh P., Malaj E., Nguyen T., Pan H., RA Phan S., Qi S., Qian Y., Ray L., Ren Q., Shaull S., Sloan D., Song L., RA Phan S., Qi S., Qian Y., Ray L., Ren Q., Willingham D., Wu H., Yao Z., Ra Zhan M., Zhang Y., Wang Z., White J., Willingham D., Wu H., Yao Z., Ra Zhan M., Zhang G., Chissoe S., Murray J., Miller N., Minx P., RA Cordes M., Du Z., Pulton L., Goela D., Graves T., Hawkins J., RA Hinds K., Kemp K., Latreille P., Layman D., Ozorsky P., Rohlfing T., RA Hinds K., Kemp K., Latreille P., Layman D., Ozorsky P., Rohlfing T., RA Hinds K., Kemp K., Hillier L.W., Mardis B., Waterston R., Ra Korf I., Bedell J.A., Hillier L.W., Mardis B., Waterston R., Ra Wilson R., Emanuel B.S., Shaikh T., Kurahashi H., Saitta S., Ra Wilson R., Emanuel B.S., Shaikh T., Kurahashi H., Saitta S., Ra Budarf M.L., McDermid H.E., Johnson A., Wong A.C.C., Morrow B.E., Ra Bedimann L., Kim U.J., Shizuya H., Simon M.I., Dumanski J.P., RA Payrard M., Kedra D., Seroussi E., Fransson I., Tapia I., Bruder C.E., RA O'Brien K.P., Wilkinson P., Bodenteich A., Hartman K., Hu X., RA Khan A.S., Lane L., Tilahun Y., Wright H., Rattman K., Hu X.,
EMBL; AJ002305; CAA05322.1; -.
EMBL; AJ002304; CAA05321.1; -.
EMBL; AJ002303; CAA05320.1; -.
EMBL; AL022326; CAA18451.1; -.
EMBL; AL022326; CAA18452.1; -.
EMBL; AL022326; CAA18453.1; -.
EMBL; BC000731; AAH00731.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Brain;
MEDLINE-22388257; PubMed-12477932; DOI-10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. (ISOFORM 18).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IsoId=043759-3; Sequence=VSP_006331, VSP_006332;
SIMILARITY: Belongs to the synaptogyrin family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IsoId=043759-2; Sequence=VSP_006332;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IsoId=043759-1; Sequence=Displayed;
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MIM; 603925; -. GO; GO:0005887; C:integral to InterPro; IPRO08253; Marvel.

plasma membrane;

H-InvDB; HIX0016490;

HGNC:11498; SYNGR1.

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PARRER REPRESENTATION OF THE PROPERTY OF THE P
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RX MEDLINE-2235-683; PubMed-1246851; DOI-10.1038/nature01266;
RX Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Cuackenbush J.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Baldarelli R., Fradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA Balae J.A., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis B.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Kanai A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Magjashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Ravasi T., Reed J.C., Reed D.J., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Setou M., Shimada K.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
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Alternative spilcing; Sy
TRANSMEM 24 44
TRANSMEM 72 92
TRANSMEM 104 124
TRANSMEM 104 169
VARSPLIC 1 33
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30-MAY-2000 (Rel. 3)
28-FEB-2003 (Rel. 4)
25-OCT-2004 (Rel. 4)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synaptogyrin-1.
Name=Syngr1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. (ISOFORM 1B).
MEDLINE=98430994; PubMed=9760194;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=C57BL/6J; TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hum. Genet. 103:131-141(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Characterization of the human synaptogyrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10090;
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234 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41, Last sequence update)
45, Last annotation update)
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25570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Chordata;
; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISOFORMS 1A AND 1B)
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99.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ¥.
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L; Mismatches
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8B015CBBBD461E12
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AGQAVLAFQRYQIGADSALFSQDYMDPSQDSSMPYAPYVEP
NTGPDPAGMGGTYQQPANTFDTBPQGYQSQGY -> SLTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EFGILEFDPSWIGSWTQRSWVSWRSRPGCB
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MEGGAYGAGKAGGAFDPYTLVRQPHTILRVVSW
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E., Roe B.
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Piehl F.,
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                      SNG1 RAT STANDARD;
052876;
30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last seq
25-OCT-2004 (Rel. 45, Last ann
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Birney B., Hayashizaki Y.; "Analysis of the mouse transcriptome based on functional annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF0128
Alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE

    -!- SIMILARITY: Belongs to the synaptogyrin family.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro;
NCBI_TaxID=10116;
               Bukaryota; Metazoa; Chordata;
Mammalia; Butheria; Rodentia;
                                            Rattus norvegicus (Rat)
                                                                           Synaptogyrin-1 (p29).
                                                            Name=Syngr1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBCELLULAR LOCATION: Integral membrane protein. ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , AJ002306; CAA05323.1; -., AK002972; BAB22487.1; -., AK010442; BAB25943.1; -., MG1:1328323; Syngr1.
xPro; IPR008253; Marvel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=1B;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pr01284; MARVEL; 1.
native splicing; Synapse;
                                                                                                                                                                                                                                                                                                                                                     105;
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                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                       MEGGAYGAGKAGGAFDPYTLVRQPHTILRVVSWLFSIVVFGSIVNEGYLNSASEGEQFCI
                                                                                                                                                                                                                                             YNRNDNACSYGVAVGVLAFLTCLLYLALDVYFPQISSVKDRKKAVLSDIGVS 112
                                                                                                                                                                                                                                YNRNPNACSYGVTVGVLAFLTCLLYLALDVYFPQISSVKDRKKAVLSDIGVS
                                                                                                                                                                                                                                                                                       Meggaygagkaggapdpytlurophtilruvswupsiuvpgsiunegylnnpeeeeepci
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92
124
169
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93.8%;
                                                                                        sequence update)
annotation update)
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                                                                                                                                                                                                                                                                                                                                                                   Score 550; DB 1;
Pred. No. 6.1e-44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGQAVLAFQRYQIGADSALFSQDYMDPSQDSSMPYAPYVEP
SAGSDPAGMGGTYQHPANAFDAEPQGYQSQGY -> SLTAA
LAVRRFKELTFQEEYNTLFPASAQP (in isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Potential
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0956602IDF3E809A CRC64;
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                                                                                                                                                      PRT;
               Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rat
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Best Local S
Matches 91
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Best Local (
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01-MAR-2002
01-OCT-2003
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SEQUENCE
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SEQUENCE FROM N.A.
MEDLINE-96134029; PubMed=8557746; DOI=10.1083/jcb.131.6.1801;
Stenius K., Janz R., Suedhof T.C., Jahn R.;
Structure of synaptogyrin (p29) defines novel synaptic vesicle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q8UW67
Q8UW67;
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-I- SUBCELLULAR LOCATION: Integral membrane protein -I- TISSUE SPECIFICITY: Nervous system. -I- SIMILARITY: Belongs to the synaptogyrin family.
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J. Cell Biol. 131:1801-1809(1995)
                                                                                                                   SEQUENCE FROM N.A.

MEDLINE=21643879; PubMed=11784032; DOI=10.1006/dbio.2001.0428;

Shibata M., Itch M., Ohmori S., Shinga J., Taira M.;

Shibata M., Itch M., Ohmori S., Shinga J., Taira M.;

"Systematic screening and expression analysis of the head orga-
genes in Xenopus embryos.";

Dev. Biol. 239:241-256(2001).

EMBL, AB072005; BAB79595.1; -

GO; GO:0016020; C:membrane; IEA.

Pfam; PF01284; MARVEL; 1.
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InterPro; IPR008253; Marvel.
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                                                                                                                                                                                                                                                                                                                                                                                                                      Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P7D11
                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Name=P7D11;
                                                                                                                                                                                                                                                                                                                                                                                                  Kenopodinae; Kenopus.
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nilarity 92.9%;
Conservative
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149
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     Conservative
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AA; 25535 MW;
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92 P
125 P
169 P
; 25669 MW;
  71.1%; Score 500; D: 81.2%; Pred. No. 3.3: ive 13; Mismatches
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25,
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Potential.
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CRC64;
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